

77. *Lycoperdon, pusillum, Fr.* Little puff-ball, at the roots of willows, North Common, Hx., Oct., 1880.
78. *Lycoperdon saccatum, Vahl.* Elongated puff-ball. N. W. Arm, Oct., 1880.
79. *Lycoperdon pyriforme, Schæff.* Pear-shaped puff-ball. On stumps in various places. Oct., 1880.

Gen. 71, *Scleroderma, F.*

80. *Scleroderma vulgare, Fr.* On roadsides. Common. Aug.

ORDER X.—*Myxogastres.*

Gen. 74, *Lycogala, Mich.*

81. *Lycogala epidendrum, Fr.* On rotten willow stumps. Oct., 1880.

ART. III.—ON THE OCCURRENCE OF LIEVRITE IN NOVA SCOTIA.

BY EDWIN GILPIN, A. M., F. G. S., *Inspector of Mines.*

(Read January 17, 1881.)

I WISH to bring to the notice of the Institute the occurrence in Nova Scotia of a mineral resembling Lievrite, as described by Sir William Logan in his *Geology of Canada*, p. 465.

The mineral as found in this Province came from Gabarus, in the Island of Cape Breton, and was given to me some years ago by a man who thought it was an ore of Molybdenum.

On examination I found the colour to be black, with a faint olive tinge; fracture uneven, glistening, and subvitreous; hardness, 6; specific gravity, 3.75; streak greyish. The specimen was faintly magnetic, but this property may have been more strongly manifested when it was fresh. It fused before the blow-pipe to a dark magnetic slag, and gave the ordinary iron reactions. It gelatinised slightly with Hydrochloric acid.

My analysis of the specimen is as follows, and for the sake of comparison, is placed beside that given by Sir W. Logan, as cited above:

	Nova Scotia.	Ottawa.
Iron protoxide .....	54.545	56.52
Iron peroxide.....	6.620	10.80
Silicic acid.....	28.570	27.80
Manganese peroxide.....	2.507	trace
Sulphuric acid.....	trace	—
Lime.....	3.030	.64
Magnesia.....	1.100	2.59
Moisture.....	3.115	1.20
Carbonic acid.....	trace	—
	99.487	99.55

The specimen brought me was stated to have come from a bed a few inches thick on the south shore of Gabarus Bay. I do not know the exact locality; consequently, some doubt may arise as to its proper geological age. Mr. Fletcher, of the Canadian Geological Survey, states in his Report of Progress, 1875-76, that this part of Gabarus Bay is occupied by felsites of Laurentian age, which is confirmatory of the age assigned to the mineral by Sir W. Logan.

The description in the Geology of Canada is as follows:

"It contains some black mica, and portions of red garnet, and forms a mineral of a velvet black colour, weathering rusty red, but having within a shining submetallic lustre. Its hardness is 5.5, and specific gravity 4.15. Powder, yellowish ash-gray. Slightly translucent on the edge, and strongly magnetic. Brittle with an uneven fracture, and cleavage imperfect in two directions oblique to one another. Before the blowpipe it intumesces and yields a black slag; with hydrochloric acid it gelatinises. From its composition (given above) not less than its physical characters, this substance is regarded as a variety of Lievrite. It probably forms a bed in the Laurentian series, as a boulder of it, nearly a foot thick, was found near Ottawa, but the rock has not been observed in situ."

The analyses of this mineral from Elba, as given by Dana, all show the presence of 11 to 15 per cent. of Lime, which is present in small quantities only in that from Canada. And he

regards the specimen representing mineral, however, would show the presence of lievrite.

The mineral is found in the Cape Calm and Cape Calm crystals. At the specimens are found in Siberia and in America.

In America, the mineral is found in the Island, and some prisms, longitu faces. These minute crystal exhausted.

The mineral is found to exist in quantities in an economic form, peroxides of iron, a most important mineral occurring in the

#### ART. IV.—ON THE BEHAVIOUR OF

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regards the specimen described in the Geology of Canada as representing rather a variety of Fayalite. The occurrence of a mineral, however, in Nova Scotia, resembling it so strongly, would show that it may be most properly considered a variety of leiorite.

The mineral is principally found in Elba, at Rio la Marina and Cape Calmite, where it occurs in disseminated and grouped crystals. At one time the crystals were abundant, the finer specimens are now rare, and bring extravagant prices. On this Island it occurs in dolomite with pyroxene, etc. It has been found in Siberia, Silicia, and Norway.

In America it was formerly obtained in Cumberland, Rhode Island, and Somerville, Mass., in long slender slightly rhomboidal prisms, longitudinally striated and sometimes presenting terminal faces. These prisms are implanted on granular quartz with minute crystals of magnetite, but the supply now appears to be exhausted.

The mineral I have shown you this evening is not considered to exist in quantities which would lead to any hope of its finding an economic value. Its decomposition, however, would supply peroxides of iron, and compounds such as these may have formed a most important source for many valuable iron ore deposits occurring in strata succeeding the Laurentian.

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ART. IV.—ON THE BIRDS OF PREY OF NOVA SCOTIA.—BY J.  
BERNARD GILPIN, A. B., M. D., M. R. C. S.

(Read 10th Jan., 1881.)

IN making this list I have personally identified, with one or two exceptions, every species in it. I will not say that no other specimen may be added, but that if hereafter noted, it will be a very rare one to have escaped my notice of more than thirty years. Personal identification of each species also by the writer, even if in a narrow limit, adds always to the interest and value of a paper. In classification I have used Key to N. American Birds, by Dr. Coues, 1872, of the value of which it scarcely needs